

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Sodium Sarcosinate Solution 40%

Registration number : 01-2119487285-28-0005

CAS-No. : 4316-73-8

EC-No. : 224-338-5

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-
stance/Mixture : Chemical intermediate

1.3 Details of the supplier of the safety data sheet

Company : Alzchem Trostberg GmbH
Dr.-Albert-Frank-Str. 32
83308 Trostberg, Germany

Telephone : +49 8621 86-3351

E-mail address of person
responsible for the SDS : alz-pst@alzchem.com

1.4 Emergency telephone number

Emergency telephone num-
ber : +49 8621 86-2776
Alzchem Trostberg GmbH, Fire Brigade

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H314 Causes severe skin burns and eye damage.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

Precautionary statements :

Prevention:

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

SECTION 3: Composition/information on ingredients

3.1 Substances

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)
Sodium Sarcosinate	4316-73-8 224-338-5	>= 39.5 - <= 40.5
Sodium Hydroxide	1310-73-2 215-185-5	>= 0.5 - <= 0.8

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Immediate medical attention is required.
Remove contaminated or soaked clothing immediately and dispose of safely.

If inhaled : Bring affected person outside and ensure that he/she is comfortable.

In case of skin contact : Wash off with plenty of water and soap immediately. Call a physician immediately.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Remove contact lenses if this can be easily done.
Immediate further treatment in ophthalmic hospital/ ophthalmologist.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

If swallowed : Do NOT induce vomiting.
Rinse out mouth.
Drink 1 or 2 glasses of water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray, foam, CO₂, dry powder.
Unsuitable extinguishing media : high volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : Carbon oxides
Nitrogen oxides (NO_x)

5.3 Advice for firefighters

Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment; see section 8.

6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with liquid-binding material, e. g.: diatomaceous earth, sand, universal binder
Keep in suitable, closed containers for disposal.
Large spills should be collected mechanically (remove by pumping) for disposal.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

- Advice on safe handling : Provide sufficient ventilation and exhaust at the workplace. The substance must be handled under strictly controlled conditions in accordance with Article 17/18 of the REACH regulation. Handle in accordance with good industrial hygiene and safety practice.
- Advice on protection against fire and explosion : No special precautions required.
- Hygiene measures : Do not inhale vapours / aerosols. Contact with skin, eyes and clothes must be strictly avoided Wash contact areas after handling. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink or smoke while working. Wash hands, and/or face before breaks and when workday is finished. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep in a well-ventilated place.
- Advice on common storage : Keep away from, and do not store with, acids
- Storage period : 24 Months
- Packaging material : Suitable material: stainless steel, 1.4301, 1.4541, 1.4571
Unsuitable material: Aluminium, Zinc

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Sodium Hydroxide	1310-73-2	STEL	2 mg/m ³	GB EH40

8.2 Exposure controls

Personal protective equipment

- Eye protection : close-fitting protective goggles (e.g. closed goggles)
- Hand protection
- Material : Nitrile rubber, Recommendation: Camatril 730
 - Break through time : > 480 min
 - Glove thickness : 0.4 mm
 - Directive : DIN EN 374
 - Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

Skin and body protection : Protective clothing

Respiratory protection : Use suitable respiratory protection where aerosols/vapours are generated.
Dust protection mask in accordance with EN 149 FFP2

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless - yellow

Odour : odourless

pH : 13 - 14

Freezing point : < -100 °C

Boiling point/boiling range : ca. 113 °C

Flash point : Not applicable

Vapour pressure : 23.4 hPa (20 °C)

Relative density : 1.2058 (20 °C)

Density : 1.21 g/cm³ (20 °C)

Solubility(ies)
Water solubility : miscible (20 °C)

Auto-ignition temperature : 472 °C

Decomposition temperature : 90 °C
Decomposition energy (mass): 60 J/g

9.2 Other information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

|| See section 10.3

10.2 Chemical stability

|| No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with: acids

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : Aluminium
Acids
Nitrous acid and other nitrosating agents

10.6 Hazardous decomposition products

|| Hazardous decomposition products formed under fire conditions.
see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

Sodium Sarcosinate:

Acute oral toxicity : LD50 (rat): > 6400 mg/kg
Assessment: Based on available data, the classification criteria are not met.
Remarks: IUCLID

Acute inhalation toxicity : LC0 (Rat): 3.41 mg/l
Exposure time: 8 h
Method: OECD Test Guideline 403
Assessment: Based on available data, the classification criteria are not met.
Remarks: maximum concentration in the test: no animals died.
IUCLID

Acute dermal toxicity : Remarks: no data available
IUCLID

Sodium Hydroxide:

Acute oral toxicity : Assessment: Based on available data, the classification criteria are not met.
Remarks: IUCLID

Acute inhalation toxicity : Assessment: Based on available data, the classification criteria are not met.
Remarks: IUCLID

Acute dermal toxicity : Assessment: Based on available data, the classification criteria are not met.
Remarks: IUCLID

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

Skin corrosion/irritation

Product:

Assessment : Causes severe skin burns and eye damage.

Components:

Sodium Sarcosinate:

Species : reconstructed human epidermis (RhE)
Assessment : Causes severe skin burns and eye damage.
Method : OECD Test Guideline 431
Result : corrosive
Remarks : IUCLID

Sodium Hydroxide:

Assessment : Corrosive
Remarks : IUCLID

Serious eye damage/eye irritation

Product:

Assessment : Causes serious eye damage.

Components:

Sodium Sarcosinate:

Assessment : Causes serious eye damage.
Remarks : IUCLID

Sodium Hydroxide:

Assessment : Causes serious eye damage.
Remarks : IUCLID

Respiratory or skin sensitisation

Components:

Sodium Sarcosinate:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

Sodium Hydroxide:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

Germ cell mutagenicity

Components:

Sodium Sarcosinate:

Germ cell mutagenicity- Assessment : Not mutagenic in Ames Test
Remarks: IUCLID

Sodium Hydroxide:

Germ cell mutagenicity- Assessment : Based on available data, the classification criteria are not met.
Remarks: IUCLID

Carcinogenicity

Components:

Sodium Sarcosinate:

Carcinogenicity - Assessment : no data available
Remarks: IUCLID

Sodium Hydroxide:

Carcinogenicity - Assessment : Based on available data, the classification criteria are not met.
Remarks: IUCLID

Reproductive toxicity

Components:

Sodium Sarcosinate:

Reproductive toxicity - Assessment : no data available
Remarks: IUCLID

Sodium Hydroxide:

Reproductive toxicity - Assessment : Based on available data, the classification criteria are not met.
Remarks: IUCLID

STOT - single exposure

Components:

Sodium Sarcosinate:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

Sodium Hydroxide:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

STOT - repeated exposure

Components:

Sodium Sarcosinate:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

Sodium Hydroxide:

Assessment : Based on available data, the classification criteria are not met.
Remarks : IUCLID

Aspiration toxicity

Components:

Sodium Sarcosinate:

Based on available data, the classification criteria are not met.
Remarks : IUCLID

Sodium Hydroxide:

Based on available data, the classification criteria are not met.
Remarks : IUCLID

Further information

Product:

Remarks : No additional toxicological data are available.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Sodium Sarcosinate:

Toxicity to fish : LC50 (Leuciscus idus): > 10000 mg/l
Exposure time: 96 h
Test substance: This information is derived from evaluation of
or a test result for a similar compound (conclusion based on
analogy).
Method: DIN 38412 Teil 15
Remarks: IUCLID

Toxicity to daphnia and other : EC50 (Daphnia magna): > 500 mg/l
aquatic invertebrates
Exposure time: 48 h
Method: Directive 79/831 EEC
Remarks: IUCLID

Toxicity to algae/aquatic : EC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

plants
End point: growth rate
Exposure time: 72 h
Method: DIN 38412, T.9
Remarks: IUCLID

Toxicity to microorganisms : EC 20 (local activated sludge): > 1000 mg/l
Exposure time: 0.5 h
Method: OECD 209
Remarks: IUCLID

Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

Sodium Hydroxide:

Toxicity to fish : LC50 (estimation) (Fish): > 100 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Ceriodaphnia sp.): 40.4 mg/l
Exposure time: 48 h
Remarks: IUCLID

12.2 Persistence and degradability

Components:

Sodium Sarcosinate:

Biodegradability : Biodegradation: 90 - 100 %
Exposure time: 14 d
Remarks: Readily biodegradable.

Biochemical Oxygen Demand (BOD) : 710 mg/g
Incubation time: 5 d

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6 Other adverse effects

Product:

Additional ecological information : No further ecotoxicological data are available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

mation

Components:

Sodium Hydroxide:

Additional ecological information : The product may be harmful to aquatic organisms by pH-shift.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.

Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

SECTION 14: Transport information

14.1 UN number

ADR : UN 3267

RID : UN 3267

IMDG : UN 3267

IATA : UN 3267

14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
(Sodium sarcosinate)

RID : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
(Sodium sarcosinate)

IMDG : CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
(Sodium sarcosinate)

IATA : Corrosive liquid, basic, organic, n.o.s.
(Sodium sarcosinate)

14.3 Transport hazard class(es)

ADR : 8

RID : 8

IMDG : 8

IATA : 8

14.4 Packing group

ADR

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

Packing group : II
Classification Code : C7
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

RID

Packing group : II
Classification Code : C7
Hazard Identification Number : 80
Labels : 8

IMDG

Packing group : II
Labels : 8
EmS Code : F-A, S-B
Remarks : Clear of living quarters.
Keep separate from acids.

IATA (Cargo)

Packing instruction (cargo aircraft) : 855
Packing instruction (LQ) : Y840
Packing group : II
Labels : Class 8 - Corrosive substances
Remarks : ERG-Code 8L

IATA_P (Passenger)

Packing instruction (passenger aircraft) : 851
Packing instruction (LQ) : Y840
Packing group : II
Labels : Class 8 - Corrosive substances
Remarks : ERG-Code 8L

14.5 Environmental hazards

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable for product as supplied.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Revision Date: 21.08.2019

Specification: 132886

Material no.:

Date of first issue: 26.02.2016

Print Date: 05.02.2022

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2 Chemical safety assessment

No substance safety assessment is required for this product because it is an internal local intermediate product and/or a transported intermediate product.

SECTION 16: Other information

Full text of other abbreviations

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guid-

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Sodium Sarcosinate Solution 40%

Version 1.2 / GB

Specification: 132886

Date of first issue: 26.02.2016

Revision Date: 21.08.2019

Material no.:

Print Date: 05.02.2022

ance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GB / EN